

**UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF TEXAS
HOUSTON DIVISION**

**QUANTLAB TECHNOLOGIES LTD.
(BGI) AND QUANTLAB FINANCIAL,
LLC,**

Plaintiffs,

V.

**VITALIY GODLEVSKY, ANDRIY
KUHARSKY, ANNA MARAVINA, PING
AN, EMMANUEL MAMALAKIS, AND
SXP ANALYTICS, LLC,**

Defendants.

[illegible]

CIVIL ACTION NO. 4:09-cv-4039

MEMORANDUM & ORDER

Plaintiffs Quantlab Technologies Ltd. (BGI) and Quantlab Financial, LLC, (“Plaintiffs” or “Quantlab”) have brought suit against Defendants Vitaly Godlevsky, Andriy Kuharsky, Anna Maravina, Ping An, Emmanuel Mamalakis, and SXP Analytics, making a host of allegations, including copyright infringement, breach of contract, misappropriation of trade secrets, and fraud. (*See* Doc. No. 125.) Several motions are presently before the Court. First, the Court takes up, and **DENIES**, a Motion for Partial Judgment on the Pleadings, brought by Defendants Kuharsky and Maravina. (Doc. No. 303.) Next, the Court addresses Plaintiffs’ Motions for Sanctions, in which Quantlab alleges — in short — that willful spoliation of relevant evidence by Dr. Godlevsky, Dr. Kuharsky, and Mr. Mamalakis (referred to henceforth as “Defendants”) warrants litigation-ending punishment. (Doc. Nos. 402, 469.) Quantlab has also asked the Court to impose monetary sanctions against non-party Singletick, for what it characterizes as “continued contemptuous conduct.” (Doc. No. 428 at 1.) This is not the first time one of these parties has asked the Court for sanctions. (*See* Doc. Nos. 46, 152)

In considering the motions for sanctions, the Court conducted a two-day evidentiary hearing and reviewed pre-trial and post-trial briefing. In view of the foregoing, the Court **GRANTS** Plaintiffs' Motion for Sanctions against Defendants, but **DENIES** Plaintiffs' request that it strike Defendants' pleadings or prohibit Defendants from offering evidence on the merits at trial. The Court **DENIES** Plaintiffs' Motion with respect to non-party Singletick. As is more fully explained below, the Court will allow Plaintiffs to argue spoliation to the jury, with the specifics to be worked out closer to trial. The Court is willing to reconsider this decision down the road — either because new evidence of Defendants' wrongdoing comes to light or because the lost evidence is revealed to be even less relevant than the Court currently believes — but it is the Court's sincere wish that, with this motion put to rest, this case can proceed toward a resolution that is now long overdue.

I. BACKGROUND

To determine whether dispositive sanctions are warranted, “we must recount the long and tortured course this litigation has taken.” *Woodson v. Surgitek, Inc.*, 57 F.3d 1406, 1407 (5th Cir. 1995).

A. Quantlab Technologies

Plaintiffs Quantlab Technologies Ltd. (BVI) and Quantlab Financial, LLC (collectively, “Quantlab”) comprise a quantitative financial research firm that claims to have highly valuable proprietary trade secrets in the form of trading strategies and technology for publicly traded stocks.

Dr. Kuharsky, a native of the Ukraine and a Ph.D. in applied mathematics (Doc. No. 473 at 9), joined Quantlab in mid-2001 after stints in academia, at a software development company, and with a statistics firm. (*Id.*) Dr. Kuharsky says Quantlab hired him as a Quantitative

Research Scientist “to come up with some ideas of trading, how to trade.” (Doc. No. 473 at 10.) In September of the same year, Dr. Godlevsky, a financial engineer with a Ph.D. in computational physics (Doc. No. 471 at 128), was also hired by Quantlab as a Quantitative Research Scientist, (Doc. No. 125 ¶ 26).

When Drs. Kuharsky and Godlevsky were hired, Quantlab “was just on the edge of bankruptcy” and “was shrinking,” according to Dr. Godlevsky. (Doc. No. 471 at 131.) Dr. Kuharsky agreed: “the company was basically going downhill very fast. . . . Statistical arbitrage strategies were stopped (sic) being profitable around 2000, 2001. So investors started taking out money very fast. So the company was basically in very bad shape.” (Doc. No. 473 at 10.) When the company started to trade using Dr. Godlevsky’s algorithm in 2002, however, it became “very successful,” he said, with profits increasing rapidly each year (Doc. No. 471 at 131.)

Both gentlemen worked in Quantlab’s research department, which was tasked with identifying inefficiencies in the stock market and devising trading strategies. (Doc. No. 473 at 11-12.). The research group also wrote code. (*Id.*) It handled the programming for the trading system’s “brain,” but not “the data being routed to the brain.”¹ (*Id.* at 14.) Put another way, the research group’s role “was just to decide what to buy and that’s it. . . . [W]e just say, [b]uy this stock, a hundred shares, and all other work was done by technology group.” (*Id.*) The technology group gathered data, processed it, sent orders to exchanges, and handled cost processing. (*Id.* at 12.) Dr. Kuharsky’s now-wife, Ana Maravina, worked in the technology group, as did Ping An. (*Id.* at 12-13.) Both are Defendants to this lawsuit.

After several profitable years, both men were terminated in March 2007. (Doc. No. 473 at 19; Doc. No. 471 at 128.) Dr. Godlevsky says that he was told at the time that he had

¹ According to Mr. Mamalakis, the brain is the “mechanism by which you’re deciding, do you buy or sell a stock or which one do you or which one don’t you.” (Doc. No. 471 at 40.) It is the most important part of a high frequency trading operation.

underperformed, but he posits that, in reality, he was terminated because he “asked uncomfortable questions to Quantlab about trading practices, deletion practices, offshore accounts,” as well as potential SEC violations. (Doc. No. 471 at 132, 134.) Dr. Kuharsky, meanwhile, was told at the time “that [he] no longer [met] the requirements of senior research analyst.” (Doc. No. 473 at 19.) He volunteered instead to take a demotion, but Quantlab refused. (*Id.* at 20.) Dr. Kuharsky speculates that the real reason for his firing may have been some combination of his accusations of financial malfeasance by Quantlab management and his girlfriend’s sexual assault accusation against the Chief Technology Officer. (*Id.* at 20-21.)

B. SXP Analytics

In the spring of 2007, Dr. Godlevsky encountered a man named Emmanuel Mamalakis at an Arizona monastery. (Doc. No. 471 at 36.) As the two men became acquainted, Dr. Godlevsky explained to Mr. Mamalakis the basics of high frequency trading and “what had been going on with his relationship with Quantlab.” *Id.* Before long, discussion turned to whether Dr. Godlevsky could do his “own thing.” *Id.* Mr. Mamalakis does not deny that his venture with Dr. Godlevsky was inspired to a significant extent by what Quantlab was doing. (*See, e.g., id.* at 99-100.) But, he explained to the Court that, from SXP’s inception, he was under the impression that simply duplicating Quantlab code would not be a viable business strategy. He explained:

It would be impossible to beat Quantlab using Quantlab’s brain. Because if I’m using Quantlab’s brain and they’re using their brain, their hardware, their infrastructure is so much faster, you’re just going to bump heads and they’re going to beat you to the punch. If you wanted to be better than Quantlab, you actually had to have something fundamentally new, something fundamentally different, where you could be beating them not on using their identical item. Because just using their identical item, you’re just butting heads against each other, and they’ll beat you every time on speed and power of hardware.

(*Id.* at 101.) Accordingly, Mr. Mamalakis represented that he and Dr. Godlevsky never discussed using Quantlab’s exact trading strategy or model. (*Id.* at 111-12) The goal, Mr.

Mamalakis acknowledged, was “to build a better mousetrap” and “box [Quantlab] out of the space.” (*Id.* at 102.)

Mr. Mamalakis therefore founded SXP Analytics, a high-frequency trading company, in July 2007. (*Id.* at 27.) Dr. Godlevsky and Dr. Kuharsky joined him later that fall. *Id.* Mr. Mamalakis served as the company’s CEO (*id.* at 37), but he had no role in designing SXP’s trading system, trading strategy, or trading infrastructure, (*id.* at 91). From the start, Mr. Mamalakis knew that Dr. Kuharsky and Dr. Godlevsky were in litigation against Quantlab (*id.* at 96), regarding whether they had used or were going to use Quantlab trade secrets, (*id.* at 103).

When SXP opened, it was a bare-bones operation. Dr. Kuharsky explained that “we rented an office. We bought some computer parts. . . . [W]e didn’t have a system administrator. I was building computers myself, installing operating system and all this stuff. We were . . . without any budget. We were just trying to write some small building blocks.” (Doc. No. 473 at 24.) Dr. Kuharsky says that in SXP’s early days, its leadership decided “everything would be written, of course from scratch” and to use a different operating system (Linux) from Quantlab (Windows), “just so that there would be no questions asked in the future.” (*Id.* at 23.) He added that “there was no[t] ever discussions of . . . Quantlab code or copying Quantlab code.” (*Id.* at 24.)

The “code” that SXP sought to write would process massive amounts of stock market data and decide whether to buy or sell a particular stock. (Doc. No. 471 at 40.) The code was “constantly” changing, per Mr. Mamalakis. (*Id.* at 41.) “The main brain code had to be updated all the time . . . because what would happen is, you would design a simulator on the side that would . . . simulate what the market conditions were to be able to identify what’s changed and

how should the brain think or what should the brain be doing now.” (*Id.*) In short, the code “gets stale very quickly.” (*Id.* at 42.)

Mr. Mamalakis explained that, “in order for [the code] to ever get implemented — in order for that code now to be used out at the markets, it has to sit in the server room, it has to be put on the servers there, it has to be backed up, and then has to be sent out to the remote server at the market.” (*Id.* at 43.) The server room, where the “main brain” was kept, was located in Houston until September 2008 and then in Milwaukee. (Doc. No. 471 at 46.)

Mr. Mamalakis estimates that SXP had about twelve developers who wrote code. (*Id.* at 56.) SXP developers worked remotely from their homes all across the county. (*Id.* at 54-55.) Developers wrote “items that were used in the main brain” as well as code for “the data feed or . . . the order router or . . . the item that split up the data into its components.” (*Id.* at 44-45.) There were also developers “who wrote the code, where in the trading when you’re watching what’s going on, they’d have to write the code that made it viewable so that you could see.” (*Id.* at 45.) According to Mr. Mamalakis, all code was stored in SXP’s server room. (*Id.* at 72.)

Dr. Kuharsky left SXP in January 2008. (Doc. No. 473 at 22.) He said that SXP did not trade while he was there; it only “discussed trading.” (*Id.* at 23.) SXP had not yet developed its own brain. (*Id.* at 24.) The code Dr. Kuharsky had written, he took with him. (*Id.* at 25.) He says he has produced all such code for discovery in this lawsuit. (*Id.* at 26.)

C. FBI Raid

In March 2008, less than a year after Dr. Godlevsky and Dr. Kuharsky had joined SXP and just months after Dr. Kuharsky had departed, all three SXP principals were subjected to an FBI raid so that authorities could, as Mr. Mamalakis understood it, “look[] for Quantlab code.” (Doc. No. 471 at 27, 30.) In all, the FBI recovered hundreds of thousands of files that appeared

to have been taken from Quantlab. (Doc. No. 324-43 at 6; Doc. No. 147-6 at 2-4; Doc. No. 325-1.)

Mr. Mamalakis explained that the FBI “went to the offices and to the houses of Dr. Kuharsky and Dr. Godlevsky. . . . They took any and all electronic devices. They even took some nonelectronic devices, some notebooks, some papers. . . . [I]f there was anything even remotely plausible as electronic or electronic related, they took it all.” (Doc. No. 471 at 28.)

Dr. Kuharsky had a similar recollection; he explained that “[the FBI] took everything, all the electronic devices from my house. They left a TV probably and a frig, but other than that, they took cameras. They took — they took video — you know, a video console, game console from my daughter. . . . They took all the movies. They took everything. They took all the computers. . . . All the cameras.” (Doc. No. 473 at 32.) Dr. Kuharsky agreed that there were thousands of Quantlab files seized from his residence. (Doc. No. 478 at 42.)

D. Separate Directions

Following the raid, SXP “had to completely start over” with all new equipment. (Doc. No. 471 at 29.) The FBI raid further reinforced for Mr. Mamalakis the notion that his actions were under close scrutiny.² (*Id.* at 32.) SXP resumed operations in the fall 2008. (*Id.* at 30.) Dr. Godlevsky was still with the firm, but Dr. Kuharsky did not return.

Upon leaving SXP, Dr. Kuharsky went to work in June 2008 for Magic Works, where he served as a consultant. (Doc. No. 473 at 48-49.) In that role, he once again wrote code related to high-frequency trading strategies. (*Id.* at 49.) He left Magic Works around December 2009. (*Id.*) Dr. Kuharsky found it difficult to find a post-Magic Works job with the Quantlab litigation

² He explained that “after 72 FBI agents raid your offices, all the other homes, and you find out in a meeting with the FBI that they wanted to be able to go into your house and separate out your minor children and pregnant wife by gunpoint to be able to search your house, I don’t think you’re going to turn around the next day and say, oh, I think I’m going to do — let’s do that again.” (Doc. No. 471 at 32-33.)

hanging over his head. (*Id.* at 52.) Eventually, he found a position with Jefferies LLC, a New York investment bank, where he was tasked with starting the bank's high-frequency trading group, a role which required him to spend some time writing code. (*Id.* at 52-53.) Dr. Kuharsky alleges Jefferies fired him in May 2011 upon receiving a letter from Quantlab. (*Id.* at 54.)

Dr. Godlevsky left SXP in February 2011 following a dispute with Mr. Mamalakis. (Doc. No. 471 at 128, 140.) Dr. Godlevsky attributes that acrimonious departure to his accusing Mr. Mamalakis of embezzling company funds. (*Id.* at 133.) Dr. Godlevsky says that, after he was locked out, he "lost access" to the devices he used at the company and that "all passwords were immediately changed," so he "wasn't able to log into a repository, to the central repository, or to my workstations, to other servers that I previously had access to." (*Id.* at 141.)

SXP, meanwhile, had ceased to be financially viable by mid-2012, prompting Mr. Mamalakis to begin winding down operations. (*Id.* at 58, 68-69.) As a part of that process, Mr. Mamalakis stored the company's servers and, after some deliberation, got rid of many of the individual developer workstations. (*Id.* at 71, 81.)

E. Singletick Forms

About a year after Dr. Godlevsky's departure from SXP, he reunited with Dr. Kuharsky (and others) to form Singletick (Doc. No. 426 at 7-8), which presumably would also engage in high frequency trading. Dr. Godlevsky and Dr. Kuharsky served jointly as the Milwaukee-based company's Chief Operating Officers. (Doc. No. 478 at 70; Doc. No. 471 at 152.) In July 2013, Dr. Kuharsky and Dr. Godlevsky executed a Shareholders' Agreement which, among other things, dealt with any recovery from this lawsuit and governed control of Singletick's intellectual property. (*See* Doc. No. 426 at 35; Doc. No. 394-1.) That same month, this Court ordered Dr. Kuharsky and Dr. Godlevsky to produce Singletick-related materials. (Doc. No. 381) Instead of

complying with that Order, however, both men turned their devices and documents over to other Singletick executives and Singletick sought to quash production. (Doc. No. 393; Doc. No. 448-1.) Singletick requested that Quantlab issue a subpoena and went to court in the Eastern District of Wisconsin seeking to quash that subpoena, but the materials at issue were finally produced pursuant to a court order in late October 2013. (*Id.*)

Dr. Kuharsky explained that Singletick intends to trade but has not done so yet, and has only nine employees. (Doc. No. 473 at 67.) Dr. Kuharsky said he had “no clue” what Quantlab meant when it accused him of copying confidential materials as recently as 2012 in order to create documentation for Singletick. (*Id.* at 76.)

F. Procedural History

In 2007, following Dr. Kuharsky’s and Dr. Godlevsky’s departure, Quantlab filed a lawsuit in state court, asking that Kuharsky be enjoined from revealing Quantlab trade secrets. That suit was “non-suited” soon thereafter and the instant lawsuit was eventually filed on December 18, 2009, (Doc. No. 1). In July 2010, the United States filed a motion to intervene and stay the case pending its own criminal investigation. (Doc. No. 70.) The Court granted that motion. On December 2, 2011, the government filed a status report indicating that it had declined to prosecute the matter. (Doc. No. 109.) Defendants Kuharsky and Maravina then moved to lift the stay, which the Court granted. (Doc. No. 11.)

II. MOTION FOR PARTIAL JUDGMENT ON THE PLEADINGS

Defendants Kuharsky and Maravina moved last year for partial judgment on the pleadings with respect to post-SXP claims. (Doc. No. 303.) In short, Kuharsky contends that Quantlab has failed to plead “a claim based on Mr. Kuharsky’s conduct with his post-SXP employers.” (*Id.* at 2.) The parties exchanged responses, replies, and sur-replies for the better

part of four months, and by the time this motion was fully briefed, the Court had become embroiled in the parties' myriad discovery- and sanction-related disputes. Resolution of this Motion is not just overdue, but deciding it now will help to focus the discussion of sanctions, as there is at least an argument that, if post-SXP claims have not been pleaded, the loss of certain documents and devices would not constitute spoliation of evidence.

A "motion under Rule 12(c) for judgment on the pleadings us[es] the same standard as a motion to dismiss under Rule 12(b)(6) for failure to state a claim." *Gentilello v. Rege*, 627 F.3d 540, 543-44 (5th Cir. 2010). Consequently, to avoid dismissal of its post-SXP claims, Quantlab must have pleaded "sufficient facts to 'state a claim to relief that is plausible on its face.'" *Id.* at 544 (quoting *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009)). The Court is once again asked to wrangle with the familiar, if perplexing, *Twilight* standard.

While Quantlab seems willing to acknowledge that its Second Amended Complaint is not replete with allegations arising out of Dr. Kuharsky's post-SXP conduct, Plaintiffs have nonetheless identified a series of paragraphs that it believes bring post-SXP activities within its ambit.

First, Plaintiffs have identified Paragraph 80, which reads:

Upon information and belief, in addition to all of the known thefts, incidents of unauthorized copying, and other wrongful actions described above, defendants have engaged in further thefts, incidents of unauthorized copying, and other wrongful acts relating to Quantlab's trading *strategy* and trading *technology*. Quantlab expects that the details of those misdeeds will become fully known in the course of discovery in this suit.

(Doc. No. 125 ¶ 80.) Next, Plaintiffs identify Paragraph No. 77, which states:

In or about January 2008, the conspirators had a falling out that divided them into at least two factions. SXP, Mamalakis, and Godlevsky went one way, while Maravina and Kuharsky went another way. Even after the fracturing of the conspiracy, each faction continued to copy, misuse, and exploit Quantlab's proprietary trading *strategy* and trading *technology* — including substantial

amounts of computer software and other intellectual property relating to the trading *strategy* and trading *technology* that had been internally developed by QLF. As just one example, on February 5, 2008—after Kuharsky had parted ways with SXP—Godlevsky saved a group of proprietary Quantlab source code and auxiliary files relating to a specific aspect of the Quantlab trading *strategy* onto his SXP workstation. Godlevsky was not authorized to possess or copy those files.

(*Id.* ¶ 77.)

Further, Quantlab points to a handful of additional paragraphs that allege wrongful acts undertaken following Dr. Kuharsky’s departure from SXP (*see id.* ¶¶ 68, 76, 79), although, as Dr. Kuharsky has noted, none of those acts took place any later than the FBI raid in March 2008. (Doc. No. 352 at 4.) Finally, Quantlab urges that it has sought injunctive relief to “prevent further harm,” a plea which it believes “[d]irectly puts at issue the defendants’ continuing misdeeds, from their initial thefts up to the present.” (Doc. No. 317 at 6.)

The Court agrees with Quantlab. If the question is whether Plaintiffs have put Defendants on notice of its intent to press claims related to post-SXP conduct, *see* Fed. R. Civ. P. 8, the Court is satisfied that paragraphs seventy-seven and eighty work together to inform Defendants that Quantlab seeks to hold them accountable for more than just their actions up through SXP. And it is on this front that the prayer for injunctive relief helps Quantlab; the request for injunctive relief should have helped to signal to Defendants that Quantlab believed that wrongdoing was ongoing. If the issue is whether Quantlab “pled a legally cognizable claim,” *Murthy v. Abbott Labs.*, 847 F. Supp. 2d 958, 965 (S.D. Tex. 2012) (Ellison, J.), Defendants have done nothing to suggest that a claim for post-SXP wrongdoing is barred as a matter of law for any independent reason. And if the inquiry is whether Quantlab’s claim is “plausible on its face,” the allegation that, “[e]ven after the fracturing of the conspiracy, each faction continued to copy, misuse, and exploit Quantlab’s proprietary trading *strategy* and

trading *technology*,” plainly adduces the proposition that Dr. Kuharsky continued to misuse Quantlab’s code after he departed SXP.

It is undeniable that, with everything now before the Court, Plaintiff’s post-SXP claims appear more “plausible” than they would have the day after the Second Amended Complaint was filed. But even confining the analysis to the four corners of the Complaint, the Court cannot say that post-SXP claims do not meet the plausibility standard. As a result, Defendants’ Motion (Doc. No. 303) is **DENIED**.

III. MOTION FOR SANCTIONS: THE LEGAL FRAMEWORK

There is no dispute here over whether it is within the Court’s power to issue discovery sanctions. But a brief review of the nature and extent of that authority, and consideration of how other courts have wielded it, help to put this case in context.

A. Overview

“Courts have a right to expect that litigants and counsel will take the necessary steps to ensure that relevant records are preserved when litigation is reasonably anticipated, and that such records are collected, reviewed, and produced to the opposing party.” *Pension Comm. of Univ. of Montreal Pension Plan v. Banc of Am. Sec.*, 685 F. Supp. 2d 456, 461 (S.D.N.Y. 2010), *abrogated on other grounds by Chin v. Port Auth. of New York & New Jersey*, 685 F.3d 135 (2d Cir. 2012). That statement applies with equal force to other sorts of evidence, not just “records,” and it sets forth an expectation that opposing litigants, not just courts, are entitled to hold. “For the judicial process to function properly, the court must rely ‘in large part on the good faith and diligence of counsel *and the parties* in abiding by these rules [of discovery] and conducting themselves and their judicial business honestly.’” *Victor Stanley, Inc. v. Creative Pipe, Inc.*, 269 F.R.D. 497, 525 (D. Md. 2010) (alterations in original) (quoting *Metro. Opera Ass’n, Inc. v.*

Local 100, Hotel Employees & Rest. Employees Int'l Union, 212 F.R.D. 178, 181 (S.D.N.Y. 2003), *adhered to on reconsideration*, No. 00 CIV. 3613 (LAP), 2004 WL 1943099 (S.D.N.Y. Aug. 27, 2004)).

When litigants fail to meet these expectations, courts become enmeshed in lengthy and contentious fights over spoliation of evidence. “Spoliation is the destruction or the significant and meaningful alteration of evidence.” *Rimkus Consulting Grp., Inc. v. Cammarata*, 688 F. Supp. 2d 598, 612 (S.D. Tex. 2010) (citing THE SEDONA CONFERENCE, THE SEDONA CONFERENCE GLOSSARY: E-DISCOVERY & DIGITAL INFORMATION MANAGEMENT (SECOND EDITION) 48 (2007)); *see also Apple Inc. v. Samsung Electronics Co., Ltd.*, 888 F. Supp. 2d 976, 989 (N.D. Cal. 2012) (“Spoliation, however, ‘refers to the destruction or material alteration of evidence or to the failure to preserve property for another’s use as evidence in pending or reasonably foreseeable litigation.’” (quoting *Silvestri v. Gen. Motors Corp.*, 271 F.3d 583, 590 (4th Cir. 2001))). Routine deletion of electronic information is generally not considered spoliation “unless there is a duty to preserve the information,” and even then, only when there is also “a culpable breach of that duty, and resulting prejudice.” *Rimkus*, 688 F. Supp. 2d at 612. The duty to preserve “arises when a party has notice that the evidence is relevant to litigation or . . . should have known that the evidence may be relevant to future litigation. Generally, the duty to preserve extends to documents or tangible things (defined by Federal Rule of Civil Procedure 34) by or to individuals likely to have discoverable information that the disclosing party may use to support its claims or defenses.” *Id.* at 612-13 (internal quotation marks omitted) (citing *Zubulake v. UBS Warburg LLC (Zubulake IV)*, 220 F.R.D. 212, 217-18 (S.D.N.Y. 2003)).

“It has long been the rule that spoliators should not benefit from their wrongdoing, as illustrated by ‘that favourite maxim of the law, *omnia presumuntur contra spoliatores*.’” *West*

v. Goodyear Tire & Rubber Co., 167 F.3d 776, 779 (2d Cir. 1999) (quoting 1 Sir T. Willes Chitty, et al., *Smith's Leading Cases* 404 (13th ed. 1929)). Consequently, both Federal Rule of Civil Procedure 37 and the Court's "inherent power to regulate the litigation process" allow it to impose sanctions. *Rinkus*, 688 F. Supp. 2d at 611. Rule 37 permits the Court to do so when a party "fails to obey an order to provide or permit discovery." Fed. R. Civ. P. 37(b)(2)(A). The court's inherent powers fill the void when a litigant has not directly violated a court order but where sanctions are nonetheless appropriate. "The imposition of sanctions based on the Court's inherent powers are limited to instances involving bad faith or a willful abuse of the judicial process." *Tandycrafts, Inc. v. Bubnitz*, No. 3:97-CV-1074-T, 2002 WL 324290, at *5 (N.D. Tex. Feb. 27, 2002). Inherent authority "must be exercised with restraint and discretion." *Roadway Exp., Inc. v. Piper*, 447 U.S. 752, 764 (1980).

Rule 37 sets forth seven examples of the sorts of sanctions that a court can impose, including "prohibiting the disobedient party from supporting or opposing designated claims or defenses," "striking pleadings in whole or in part," and "dismissing the action or proceeding in whole or in part." See Fed. R. Civ. P. 37(b)(2)(A)(ii), (iii), (v). Dismissal "must be available to the district court in appropriate cases, not merely to penalize those whose conduct may be deemed to warrant such a sanction, but to deter those who might be tempted to such conduct in the absence of such a deterrent." *Moore v. CITGO Ref. & Chemicals Co., L.P.*, 735 F.3d 309, 315-16 (5th Cir. 2013) (internal quotation marks omitted). Another relatively common sanction for the spoliation of evidence is a "spoliation instruction," which "entitles the jury to draw an inference that a party who intentionally destroys important documents did so because the contents of those documents were unfavorable to that party." *Russell v. Univ. of Tex. of Permian Basin*, 234 F. App'x 195, 207 (5th Cir. 2007) (citing *Vick v. Texas Employment Comm'n*, 514

F.2d 734, 737 (5th Cir. 1975)). Broadly speaking, “[i]n considering what spoliation sanction to impose, if any, courts generally consider three factors: ‘(1) the degree of fault of the party who altered or destroyed the evidence; (2) the degree of prejudice suffered by the opposing party; and (3) whether there is a lesser sanction that will avoid substantial unfairness to the opposing party.’” *Apple*, 888 F. Supp. 2d at 992 (quoting *Nursing Home Pension Fund v. Oracle Corp.*, 254 F.R.D. 559, 563 (N.D. Cal. 2008)).

As a general proposition, this Court is loath to resort to sanctions. It considers sanctions in any form to be a drastic remedy. But spoliation of evidence can warrant severe treatment. Spoliation makes it more difficult to “review the facts to discern the truth.” *Victor Stanley*, 269 F.R.D. at 526. Likewise, “[a]llegations of spoliation and the motions practice that ensues interfere with the court’s administration of justice in general by crowding its docket and delaying the resolution of cases.”³ *Id.* (collecting cases). Consequently, “[s]poliation sanctions serve a remedial function by leveling the playing field or restoring the prejudiced party to the position it would have been without spoliation. They also serve a punitive function, by punishing the spoliator for its actions, and a deterrent function, by sending a clear message to other potential litigants that this type of behavior will not be tolerated and will be dealt with appropriately if need be.” *Mosaid Technologies Inc. v. Samsung Electronics Co., Ltd.*, 348 F. Supp. 2d 332, 335 (D.N.J. 2004).

³ Judge Scheindlin cited the many hours that she and her law clerks had spent resolving a motion for sanctions as proof of just how mightily spoliation can sap the judiciary’s resources. See *Pension Comm. of Univ. of Montreal Pension Plan v. Banc of Am. Sec.*, 685 F. Supp. 2d 456, 471 n.56 (S.D.N.Y. 2010) (“I, together with two of my law clerks, have spent an inordinate amount of time on this motion. We estimate that collectively we have spent close to three hundred hours resolving this motion. I note, in passing, that our blended hourly rate is approximately thirty dollars per hour (!) well below that of the most inexperienced paralegal, let alone lawyer, appearing in this case. My point is only that sanctions motions, and the behavior that caused them to be made, divert court time from other important duties—namely deciding cases on the merits.”). As further proof, in preparing this Memorandum & Order, the Court was struck by how many of the Federal Reporters’ longest documents concern spoliation. See, e.g., *In re Ethicon, Inc. Pelvic Repair Sys. Prod. Liab. Litig.*, — F.R.D. —, No. MDL 2327, 2014 WL 439785 (S.D.W. Va. Feb. 4, 2014) (36 pages); *Rimkus*, 688 F. Supp. 2d 598 (82 pages); *Victor Stanley*, 269 F.R.D. 497 (55 pages).

B. Death Penalty Sanctions

Plaintiffs first-and-foremost seek litigation-ending sanctions. “[A] terminating sanction is justified in only the most egregious cases, such as where a party has engaged in perjury, tampering with evidence, or intentionally destroying evidence by burning, shredding, or wiping out computer hard drives.” *Pension Comm.*, 685 F. Supp. 2d at 469-70.

This district’s most influential recent opinion on spoliation sanctions is Judge Rosenthal’s in *Rimkus Consulting Grp., Inc. v. Cammarata*, 688 F. Supp. 2d 598 (S.D. Tex. 2010). Following Judge Scheindlin’s pathmarking opinions in the *Zubulake v. UBS Warburg LLC* — particularly the fourth installment, or *Zubulake IV*, 220 F.R.D. 212 (S.D.N.Y. 2003) — the *Rimkus* court held that, before a district court may grant severe sanctions for spoliation of evidence, it must determine that “(1) the party with control over the evidence had an obligation to preserve it at the time it was destroyed; (2) the evidence was destroyed with a culpable state of mind; and (3) the destroyed evidence was ‘relevant’ to the party’s claim or defense such that a reasonable trier of fact could find that it would support that claim or defense.” *Rimkus*, 688 F. Supp. 2d at 615-16.

Since the Court heard argument and the parties submitted their briefs in this case, the Fifth Circuit decided *Moore v. CITGO Ref. & Chemicals Co., L.P.*, 735 F.3d 309 (5th Cir. 2013), which affirmed a district court’s dismissal of some plaintiffs’ claims as a Rule 37 sanction for the violation of a discovery order, *id.* at 314. In *Moore*, the court of appeals reiterated that a four-factor test must be satisfied before a district court can terminate a case as a sanction for the violation of a discovery order. See *F.D.I.C. v. Conner*, 20 F.3d 1376, 1380-81 (5th Cir. 1994) (annunciating four factors). The Court of Appeals reminded lower courts to adhere to the *Conner* factors, which mandate that:

- (1) the refusal to comply results from willfulness or bad faith and is accompanied by a clear record of delay or contumacious conduct;
- (2) the violation of the discovery order must be attributable to the client instead of the attorney,
- (3) the violating party's misconduct must substantially prejudice the opposing party; and
- (4) a less drastic sanction would not substantially achieve the desired deterrent effect.

Moore, 735 F.3d at 316 (citations omitted).

Because *Moore* dealt with a slightly different situation — the violation of an express discovery order — than did *Rimkus*, it articulated its governing framework somewhat differently. But this Court believes that the two rubrics are more or less equivalent. Both expressly require culpability and prejudice. Though the *Conner* factors do not openly require the district court to make a finding of relevance, they do so implicitly. That is, it is hard to see how the destruction of evidence could cause prejudice if that evidence were not relevant. Moreover, both *Moore* and *Rimkus* recognize that sanctions should be no more severe than necessary. The fourth *Connor* factor says so explicitly and Judge Rosenthal included just such a discussion in her analysis in *Rimkus*. See *Rimkus*, 688 F. Supp. 2d at 618 (“[A] sanction [for spoliation] should be no harsher than necessary to respond to the need to punish or deter and to address the impact on discovery.”). Finally, the Court is convinced that, whether Judge Rosenthal said so or not, it was implicit in *Rimkus* that, had the contumacious conduct been attributable to an attorney and not his client, a different sort of sanctions would have been in order.

Without any allegations, by either side, that attorneys, and not clients, were responsible for the spoliation of evidence, the Court will omit any discussion of this last factor from the analysis that follows below. Thus, the three issues that warrant the Court's focus are the duty to preserve, culpability, and relevance/prejudice. The Court will address each of those three prongs in turn.

1. Duty to Preserve

First, as introduced above, the general rule is that “the duty to preserve arises when a party ‘has notice that the evidence is relevant to litigation or . . . should have known that the evidence may be relevant to future litigation.’” *Id.* at 612 (quoting *John B. v. Goetz*, 531 F.3d 448, 459 (6th Cir. 2008)). The last part of that standard is important: courts agree that “[t]he duty to preserve material evidence arises not only during litigation but also extends to that period before the litigation when a party reasonably should know that the evidence may be relevant to anticipated litigation.” *Silvestri*, 271 F.3d at 591.

2. Culpability

Second, to impose death penalty sanctions, the court must find evidence of bad faith. *Rimkus*, 688 F. Supp. 2d at 614 (citing *Condrey v. SunTrust Bank of Ga.*, 431 F.3d 191, 203 (5th Cir. 2005); *King v. Illinois Cent. R.R.*, 337 F.3d 550, 556 (5th Cir. 2003); *United States v. Wise*, 221 F.3d 140, 156 (5th Cir. 2000)). Bad faith is a term of art oft-used but rarely defined. Some courts define “bad faith” as “conduct involving ‘fraudulent intent and a desire to suppress the truth.’” *Ashton v. Knight Transp., Inc.*, 772 F. Supp. 2d 772, 800 (N.D. Tex. 2011) (quoting *Consolidated Aluminum Corp. v. Alcoa, Inc.*, 244 F.R.D. 335, 344 (M.D. La. 2006)). Others have “described ‘bad faith’ as ‘destruction for the purpose of depriving the adversary of the evidence.’” *Id.* at 801 (quoting *Victor Stanley*, 269 F.R.D. at 530). Bad faith must typically be inferred. *Russell*, 234 F. App’x at 208. It is fairly clear that a court can do so where “a party purposely loses or destroys relevant evidence.” *Managed Care Solutions, Inc. v. Essent Healthcare, Inc.*, 736 F. Supp. 2d 1317, 1322 (S.D. Fla. 2010). In *Rimkus*, Judge Rosenthal inferred bad faith where the evidence showed that “defendants knew about the litigation with *Rimkus* when they deleted the emails; the inconsistencies in the explanations for deleting the

emails; the failure to disclose information about personal email accounts that were later revealed as having been used to obtain and disseminate information from Rimkus; and the fact that some of the emails reveal what the defendants had previously denied.” *Rimkus*, 688 F. Supp. 2d at 644. Ultimately, the hallmark, or the “[t]he fundamental element,” as one court termed it, of bad faith “is advantage-seeking behavior by the party with superior access to information necessary for the proper administration of justice.” *Micron Tech., Inc. v. Rambus Inc.*, 645 F.3d 1311, 1326 (Fed. Cir. 2011).

3. *Relevance and Prejudice*

The third prong asks the Court to make two related findings: relevance and prejudice. “In the context of spoliation, lost or destroyed evidence is ‘relevant’ if ‘a reasonable trier of fact could conclude that the lost evidence would have supported the claims or defenses of the party that sought it.’” *Victor Stanley*, 269 F.R.D. at 531 (quoting *Thompson v. U.S. Dep’t of Hous. & Urban Dev.*, 219 F.R.D. 93, 101 (D. Md. 2003)). Further, “courts find prejudice where a party’s ability to present its case or to defend is compromised.” *Id.* at 532.

“Courts recognize that a showing that the lost information is relevant and prejudicial is an important check on spoliation allegations and sanctions motions. Courts have held that speculative or generalized assertions that the missing evidence would have been favorable to the party seeking sanctions are insufficient.” *Rimkus*, 688 F. Supp. 2d at 616.⁴ But, courts have also “recognize[d] that ‘[t]he burden placed on the moving party to show that the lost evidence would have been favorable to it ought not be too onerous, lest the spoliator be permitted to profit from

⁴ She continued: “By contrast, when the evidence in the case as a whole would allow a reasonable fact finder to conclude that the missing evidence would have helped the requesting party support its claims or defenses, that may be a sufficient showing of both relevance and prejudice to make an adverse inference instruction appropriate.” *Id.* at 616-17.

its destruction.”⁵ *Id.* (quoting *Chan v. Triple 8 Palace, Inc.*, No. 03CIV6048(GEL)(JCF), 2005 WL 1925579, at *7 (S.D.N.Y. Aug. 11, 2005)). There is inherent “difficulty and potential for unfairness in requiring an innocent party seeking discovery to show that information lost through spoliation is relevant and prejudicial. Those concerns are acute when the party seeking discovery cannot replace or obtain extrinsic evidence of the content of deleted information.” *Id.* at 616. Finally, it is important not to ignore the interplay between mental state and relevance/prejudice. That is, “in the case of *willful* spoliation . . . the spoliator’s mental culpability [is] itself evidence of the relevance of the documents destroyed,” but the same cannot be said where evidence is destroyed negligently or even recklessly. *Zubulake IV*, 220 F.R.D. at 221.

C. Alternatives to Terminating Sanctions

Although it is of course helpful to be able to resort to user-friendly, multi-factor standards in structuring the court’s analysis, this is not a mechanical exercise in box checking. The Court’s task is, at the end of the day, grounded in discretion. The Court’s analysis “depends heavily on the facts and circumstances of each case and cannot be reduced to a generalized checklist of what is acceptable or unacceptable.” *Id.* at 613. The analysis must remain flexible, open-ended, and based in common sense. As Judge Rosenthal has noted, “[i]t can be difficult to draw bright-line distinctions between acceptable and unacceptable conduct in preserving information and in conducting discovery, either prospectively or with the benefit (and distortion) of hindsight.” *Id.*

⁵ As one court put it: “Certainly, the level of proof that will suffice to support an inference in favor of the innocent party on a particular issue must be less than the amount that would suffice to survive summary judgment on that issue. Otherwise, innocent parties meant to benefit from the adverse inference against offending parties would receive no benefit at all, having been deprived of evidence that may have been crucial to making their case, and yet being held to precisely the same standard of proof before they may present their case to a jury.” *Kronisch v. United States*, 150 F.3d 112, 128 (2d Cir. 1998).

As such, a court “may” impose sanctions when the *Conner* factors or *Rimkus* factors are satisfied, but it is not required to do so. *Doe v. Am. Airlines*, 283 F. App’x 289, 291 (5th Cir. 2008). The Court must weigh the degree of culpability and the extent of the prejudice and reach a sensible solution. Indeed, “even if there is intentional destruction of potentially relevant evidence, if there is no prejudice to the opposing party, that influences the sanctions consequence. And even if there is an inadvertent loss of evidence but severe prejudice to the opposing party, that too will influence the appropriate response, recognizing that sanctions (as opposed to other remedial steps) require some degree of culpability.” *Rimkus*, 688 F. Supp. 2d at 613. In the end, “spoliation remedies should: (1) deter future parties from practicing spoliation; (2) punish the spoliating party for destroying relevant evidence; and (3) ‘restore the prejudiced party to the same position he would have been in absent the wrongful destruction of evidence by the opposing party.’” *Allstate Texas Lloyd’s v. McKinney*, — F.Supp.2d —, No. 4:12-CV-02005, 2013 WL 3873256, at *2 (S.D. Tex. July 24, 2013) (quoting *Ashton*, 772 F. Supp. 2d at 800).

One alternative to terminating sanctions is a spoliation instruction. Spoliation instructions are “less harsh than so-called terminating sanctions,” but still “among the most severe sanctions a court can administer.” *Rimkus*, 688 F. Supp. 2d at 619; *see also Apple*, 888 F. Supp. 2d at 994 (“That [a spoliation instruction] is a comparatively less severe sanction . . . does not mean it should be imposed casually.”). “A spoliation instruction entitles the jury to draw an inference that a party who intentionally destroys important documents did so because the contents of those documents were unfavorable to that party.” *Russell*, 234 F. App’x at 207. The theoretical underpinning of the spoliation instruction is “the common sense observation that when a party destroys evidence that is relevant to a claim or defense in a case, the party did so

out of the well-founded fear that the contents would harm him.” *Mosaid Technologies*, 348 F. Supp. 2d at 336.

The *Rimkus* factors, set forth above, govern the standards for spoliation instructions. As with litigation-terminating sanctions, a court must find bad faith, and not “mere negligence,” before it can give a spoliation instruction. *Russell*, 234 F. App’x at 208 (internal quotation marks omitted); *see also Condrey*, 431 F.3d at 203 (“The Fifth Circuit permits an adverse inference against the destroyer of evidence only upon a showing of “bad faith” or “bad conduct.”).

IV. DISCUSSION

This is a trade secrets case in which Plaintiffs assert that Defendants misappropriated the code used by Quantlab in its high-frequency trading business. (Doc. No. 125.) Plaintiffs appear to be advancing the theory that, beyond simply copying Quantlab’s code, some combination of Defendants “‘rel[ied] on the trade secret[s] to assist or accelerate research or development’ of its” own code. *Wellogix, Inc. v. Accenture, L.L.P.*, 716 F.3d 867, 877 (5th Cir. 2013) (quoting *Gen. Universal Sys., Inc. v. HAL, Inc.*, 500 F.3d 444, 451 (5th Cir. 2007)). Thus, Plaintiffs contend that each iteration of code written by Defendants since Dr. Kuharsky and Dr. Godlevsky departed from Quantlab’s employ is relevant in determining whether that code was impermissibly based upon Quantlab’s version.

With respect to the duty to preserve evidence, Plaintiffs note that “Defendants had been subject to litigation over their theft/use of Quantlab’s trade secrets since 2007, and the instant suit was filed in 2009.” (Doc. No. 449 at 18.) Plaintiffs thus argue that “it should have been obvious *at least* from 2009 that Quantlab was likely to seek to inspect Defendants’ computers, creating a duty to preserve.” (*Id.* at 19.) Moreover, Quantlab propounded discovery on Defendants in early 2010, asking for all computers used since March 9, 2007. (*Id.* (citing First

Request for Production by Kuharsky No. 119; First Requests for Production by Godlevsky No. 119; First Requests for Production by Mamalakis No. 67; First Requests for Production by SXP Nos. 95, 109, 123, 134).) While the Court is generally inclined to agree with Plaintiffs on this point, it believes that the duty to preserve is fact-specific enough that it will address this requirement below as it addresses each specific allegation of spoliation.

A. Mr. Mamalakis

Quantlab bases its claims against Mr. Mamalakis primarily upon his decision in mid-to-late 2012 to wipe clean and/or give away twenty-three developer work stations used while he was at the helm of SXP. (Doc. No. 449 at 7, 17.) As discussed in greater detail above, SXP had about twelve developers who wrote code — including, but not limited to, code for the “brain” — and worked remotely from across the country. (Doc. No. 471 at 44-45, 54-56.) Mr. Mamalakis has not disputed that he wiped some developer work stations and gave away others,⁶ but he nevertheless strenuously objects to the imposition of dispositive sanctions.

1. Duty to preserve

It is first necessary to determine whether Mr. Mamalakis was under an obligation to preserve evidence when he wiped the developer work stations. Quantlab suggests that such a duty likely arose when this suit was filed in 2009 (Doc. No. 449 at 18) and no later than early 2010, when Quantlab propounded discovery upon Mr. Mamalakis. (*Id.* at 19 (citing First Requests for Production by Mamalakis No. 67).)

Mr. Mamalakis ably demonstrated at the evidentiary hearing that the specific discovery requests propounded upon him did not require that he turn over developer workstations (*see* Doc.

⁶ Brenton Roskopf, who worked as SXP’s Linux Engineer (Doc. No. 451-4 at 3), estimated that, of the 23 workstations that were wiped, approximately eight or nine were likely to have been developer workstations at one time. (*Id.* at 17.) Roskopf confirmed that “a number of” old SXP computers were “given to or sold to employees.” (*Id.* at 12.) He did not recall any developer workstations being given to or sold to employees. (*Id.*)

No. 471 at 76-80), but the Court has a hard time totally absolving him of a duty to preserve them.⁷ Given the wide-ranging nature of Quantlab's discovery requests — Quantlab served Mr. Mamalakis individually with sixty-seven Requests of Production and SXP with another 148 — Mr. Mamalakis should have known that significantly altering or disposing of computers used by SXP employees was unwise. Indeed, Mr. Mamalakis professed to understand that evidence is not supposed to be destroyed (Doc. No. 471 at 67), and expressed regret over having handled the work stations as he did. "I am wishing 3 million times over that I would have just left it sitting there and not having dealt with this," he said. (*Id.* at 75.) The Court is convinced that Mr. Mamalakis had a duty to preserve relevant evidence when he parted ways with the work stations.

2. *Mental State*

Mr. Mamalakis does not dispute that his decision to get rid of the developer work stations was intentional in the sense that it was a volitional act. (Doc. No. 462.) Nevertheless, Mr. Mamalakis has offered a rather elaborate explanation of why he wiped and gave away the work stations and why, in the moment, it seemed like an appropriate step to take.

Facing worsening finances (Doc. No. 471 at 68-69), SXP closed its doors at the end of June 2012. (*id.* at 58). Immediately, "everything from the server room . . . [was] unplugged, stacked, and stored" in the basement of Mr. Mamalakis's home in Brookfield, Wisconsin. (*Id.*) Around the same time, SXP IT personnel came to Mr. Mamalakis to ask about the developer workstations. (*Id.* at 71.) Mr. Mamalakis says now that, at the time, his goal was to ensure that he was complying with any demand for evidence preservation imposed by this litigation, but also to wind up SXP as cheaply as possible. (*Id.* at 68-69.) Mr. Mamalakis testified that he asked his IT staff point blank whether there was "anything that is unique or relevant on those workstations

⁷ Given that Mr. Mamalakis devotes only a footnote in his post-hearing brief to disputing whether he owed a duty to preserve evidence, the Court does not even think Mr. Mamalakis is prepared to absolve himself entirely of that duty.

that is not sitting in the server room,” and he was told there was not. (*Id.* at 74.) It was his understanding that “anything that had any relevance to this lawsuit is sitting in the server room.” (*Id.* at 75.) After assuring himself that the server room was backed up, he decided to prepare the developer work stations for liquidation. (*Id.* at 71.) Indeed, he believed that forensic computer technicians would likely be able to recover down the road what had been on the computers in the event that they needed to. (*See, e.g., id.* at 75.)

Moreover, by this point, Mr. Mamalakis had already turned over SXP’s code for Quantlab to review and was told “it might be a little derivative.” (*Id.* at 69.) That conversation helped make clear that “this is about the brain.” (*Id.*) Consequently, Mr. Mamalakis believed that any proof of wrongdoing by SXP would be found in the server room. (*Id.* at 85-86.) Mr. Mamalakis admitted that he did not tell his lawyers to inform Quantlab that he would be wiping developer workstations. (*Id.* at 93.)

Around the same time, also as SXP prepared for liquidation, another set of computers was “given away” to departing staff members. Mr. Mamalakis testified that some of those computers were developers’ personal computers and “some of them might have been SXP computers.” (*Id.* at 81.) But, he said, “we made sure . . . that any of those computers never left with any information that was SXP property on them.” (*Id.* at 81-82.) He was assured that everything relevant was in the server room. (*Id.*) Mr. Mamalakis also explained that the computers that developers were allowed to keep had not been wiped. (*Id.* at 87.)

In short, as Mr. Mamalakis sees it, he may have made the wrong choice, but he did not do so in bad faith. The Court cannot agree. Mr. Mamalakis did not inform the Court that he planned to get rid of the workstations, despite the fact that this litigation had long since begun. Given an opportunity to admit after-the-fact what he had done, he declined. *See, e.g.,* Doc. No.

449-3 at 3 (stating in February 2013 affidavit — albeit in Wisconsin litigation against Dr. Godlevsky — that “SXP’s equipment, including its computers, are all securely and appropriately stored at [a specific address in Milwaukee]. I own the property where the SXP equipment is being stored”)). Likewise, in a November 12 brief submitted in the Wisconsin litigation, Mr. Mamalakis offered a characterization of SXP’s plans that is at odds with what he has represented here, noting that “[a]ll throughout the bankruptcy process, SXP attempted to operate. SXP has ceased operations as of June of the current year. However, Dr. Godlevsky has presented no evidence that SXP’s assets have been liquidated, as his motion suggests.” (Doc. No. 402-1 at 11.) Read in context, it seems rather clear that Mr. Mamalakis was disclaiming any intent to liquidate. That he did so late in 2012, when he now says he had already begun efforts to liquidate, is troubling. The Court cannot say which story is true; that there are multiple of them is enough to raise red flags.⁸

Quantlab has not done quite as well in casting doubt on the veracity of Mr. Mamalakis’s other explanations. First, Quantlab argues that “Mamalakis’s ‘liquidation’ did not extend broadly to servers and computers at the company; he erased selectively those devices *used to develop code* and those devices that were not physically located in SXP’s offices.” (Doc. No. 449 at 23.) But Mr. Mamalakis explained that he believed that everything at SXP that would be relevant to this lawsuit was stored in the server room, even old versions of code. Code, he said, was “on a system where you stack them like pancakes or when a new one comes in, you put it on top, so that if there was ever a bug that came up, you could go down layers and go to an older version and try to start from where the bug didn’t exist, so that you could try to narrow down

⁸ On cross-examination, Quantlab’s attorney brought out that Mr. Mamalakis, on behalf of SXP, filed for bankruptcy in April 2012 on the same day this Court held a hearing on a motion to compel discovery from SXP and that the bankruptcy action was dismissed the same month Mr. Mamalakis elected to wipe developer workstations. (Doc. No. 471 at 106.) Circumstantial though it is, this timeline of events only bolsters Quantlab’s claims.

where it was that you had to fix them.” (Doc. No. 471 at 72.) His understanding, therefore, was that, if SXP’s code contained bits of Quantlab code, the evidence would be found on the company’s servers. (*Id.* at 85-86.) Quantlab has proven Mr. Mamalakis’s beliefs to be untrue, but it has not shown that he did not genuinely hold them.

Second, Quantlab argues that it was “completely antithetical to liquidating” for Mr. Mamalakis to “g[i]ve away 15 to 35 additional computers, all of which would have had value to SXP’s creditors.” (Doc. No. 449 at 23.) Strictly speaking, Quantlab is correct. But, Mr. Mamalakis testified that his employees were “losing their job[s] at no fault of their own . . . and [he] wasn’t about to pull out their only laptop from their house and say, ‘Sorry, you’re computerless.’” (Doc. No. 471 at 83.) Quantlab has not contradicted this testimony.

In the end, the Court finds bad faith because Mr. Mamalakis intentionally wiped and gave away numerous computers nearly three years after the initiation of this lawsuit and concealed it from the Court. That he has given contradictory explanations of SXP’s plans to liquidate does not help his cause. To be sure, Quantlab has not shown that Mr. Mamalakis acted with more sinister motives, but neither has Mr. Mamalakis shown that his explanations can be taken at face value.

3. Relevance and Prejudice

Quantlab argues that the Court “need look no further than” Mr. Mamalakis’s own admission that the developer workstations were used by individuals ““who had the job of developing and modifying SXP’s code”” to determine that the workstations were relevant and that their absence prejudices Quantlab. (Doc. No. 449 at 26-27 (quoting Doc. No. 417 at 12).) Mr. Mamalakis, on the other hand, insisted throughout the evidentiary hearing that the workstations would not be relevant to this litigation. Mr. Mamalakis argues that “the Developer

Workstations were wiped because they did not contain any useful information and even in the remote chance that they did contain any marginally relevant information, it would have been redundant of information that existed elsewhere and was clearly preserved.” (Doc. No. 462 at 2.) Specifically, Mr. Mamalakis noted that Quantlab already has possession of SXP’s final code. (Doc. No. 471 at 85.) Mr. Mamalakis also said that he believed that anything relevant would be found on SXP’s servers, which were not destroyed. (*Id.*) And Mr. Roskopf testified that, even had the developer workstations not been wiped, it most likely would not be possible to look now to see what programs an individual developer had open at a particular point in time, given that the workstations’ systems were configured so as not to document a file’s access time. (Doc. No. 451-14 at 18.) In the end, Mr. Roskopf asserted that he did not believe that it would be possible, had the machines not been wiped, to determine whether developers had a version of Quantlab code open while crafting SXP code. (*Id.*)

Quantlab has ably rebutted most of those arguments. Noel Kersh, the forensic technology expert retained by Quantlab, rejected Mr. Mamalakis’s contention that the end-result code would be good enough. He explained that “[t]he compiled code is the end result of the development process. What we need in order to reconstruct the user activity related to that end product is for us to actually get a full picture of the evidence of what were the intermediate steps that you took in order to develop that code.” (Doc. No. 478 at 136.)

With respect to evidence of those intermediate steps, Mr. Mamalakis himself acknowledged that SXP’s backup system did not capture materials on developer workstations unless they were checked into the server. (Doc. No. 471 at 104.) Thus, he recognized that, if developers did not check in to the server what it was that they were looking at when writing code, it would not end up on the server. (*Id.*) Mr. Kersh explained why backing up a computer,

and having access to the server on which a particular machine is backed up, would be a poor substitute for having the original. (Doc. No. 478 at 134-35.) For instance, if back-ups were conducted only on Mondays and Fridays, there would be no record of something that was added Tuesday and deleted Thursday. (*Id.* at 135.) Mr. Kersh also explained that the process of “diffing,” or comparing the code as it was checked into the code management system at a certain time with the code as checked in at another, would not show all the development in the code. (*Id.* at 139-40.) Rather, such a process would not “take into account . . . the development that took place on the individual developer workstations. It [would not] take into account what they did in order to arrive at the final version of code that was checked into the system.” (*Id.* at 140.) As an example, he said it would not capture evidence of a thumb drive being plugged in and another program being pulled up as a reference source. (*Id.*)

Mr. Kersh also disputed Mr. Roskopf’s assertion that step-by-step changes would not be discoverable in light of the fact that the system did not record a file’s access time. (*Id.* at 136-37.) He said other operating systems function similarly, and so “a lot of our analysis on computers is done without having to rely on last access date.” (*Id.* at 137.) He said there were other ways, including looking at modified dates and created dates, to track the ways in which a file or program changed over time. (*Id.*) He also said that, even if the operating system was not recording the last-accessed date, individual programs, like the Eclipse developing program, would continue to capture dates. (*Id.* at 138.) Mr. Kersh also took issue with Mr. Roskopf’s suggestion that he would be unable to capture evidence of cutting and pasting. (*Id.* at 139.) Mr. Kersh said that a side-by-side comparison of code or some other sort of file would reveal any such actions. (*Id.* at 139.) Matthew Stippich, President of Digital Intelligence, which was hired

by SXP's receiver, added that it may have been possible to tell what programs SXP developers had open at a given point in time while they worked on code. (Doc. No. 451-6 at 27.)

In sum, the developer workstations were relevant, and their absence prejudices Quantlab, because those machines would have provided a more complete picture of how SXP's code changed over time and could have helped to show whether SXP developers used Quantlab code as a guide while they worked. In fact, they may have been the single best way to make such a showing. This is not to say that Quantlab has shown that the developer workstations necessarily would have helped to prove Defendants' duplicity; there is a chance that the developer workstations would have proved totally worthless and could even have been useful to Defendants in exculpating themselves. But the developer workstations would have been a fairly obvious place to look for relevant evidence, and because Mr. Mamalakis wiped some clean and gave others away, no one will ever know what they would have revealed.

4. Conclusion

That Mr. Mamalakis put the developer workstations out of Quantlab's reach is quite significant. Where the central question is whether SXP code was improperly influenced by Quantlab code, it seems rather obvious to the Court that the computers used by those individuals who wrote the code in question should have been kept on hand. That those workstations had not been the subject of a request for production does not alter this conclusion. But the Court is not prepared to impose terminating sanctions on Mr. Mamalakis. His actions were willful, but the Court cannot say with absolute certainty that his intent was to spoliage evidence. Moreover, although the evidence in question would undoubtedly have been relevant to the investigation — that is, Quantlab would have benefited from checking the workstations to see what they contained — it is still somewhat speculative that their contents would have ended up as a part of

Quantlab's case. As such, the Court is able to conclude only that they were moderately relevant and their loss moderately prejudicial.

B. Dr. Godlevsky

The accusations against Dr. Godlevsky take a different form from those made against Mr. Mamalakis. Rather than homing in on specific acts of alleged spoliation, Quantlab argues that, "in response to discovery requesting all computers used since 2007, Defendant Godlevsky could only produce *a single notebook PC* — first sold in 2009 — as evidence of all of his work, despite the fact that SXP has said — and Godlevsky admits — that he did most of his work on a home computer that he has since discarded." (Doc. No. 449 at 17.) In short, Quantlab contends that *there must be more*.

Pathway Forensics' preliminary findings more or less bear that out. Mr. Kersh testified that, in the course of Pathway's investigation, he identified twenty-seven devices that were attached to computers seized in the 2008 FBI raid but which were never produced in the litigation. (Doc. No. 478 at 146; *see also* Plaintiffs' Hearing Exhibit No. 36 (hereinafter "Ex. 36").) Of the twenty-seven, nineteen had been connected to computers that contained Quantlab code.⁹ (Ex. 36 at 1.) Of those, thirteen were also, at some point, connected to computers primarily operated by Dr. Godlevsky. (*Id.*) Five devices were attached to a computer that contained Quantlab code, a computer owned by Dr. Godlevsky, and at least one SXP computer. (*Id.*) The missing devices were mostly used in late 2007 or early 2008. (*Id.*)

Pathway's report also identified seven devices that had been attached to Dr. Godlevsky's personal laptop in 2011 or 2012, but which were not produced in August 2013 when he produced said laptop. (*Id.* at 2; *see also* Doc. No. 478 at 151-52.) Pathway concluded that two of those

⁹ Mr. Kersh acknowledged that, "[w]ithout the device we can't confirm that those are actually Quantlab files, but it appears they are." (Doc. No. 478 at 154.)

devices were also connected to a Singletick computer. (Doc. No. 478 at 153; *see also* Ex. 36.) Given an opportunity to do so, Dr. Godlevsky did not dispute those findings. (*Id.* at 154.) As to what has happened to those devices, Dr. Godlevsky explained:

I don't know. USB devices are so disposable, you know, you can have them in the form of a pen or in a pen cap. You know, I know that in the course of my work in the office, people, employees, and colleagues come into my -- may come into my room and ask to transfer something through a USB drive. I remember a few occasions when I copied a movie on somebody's drive from my Singletick computer. So some of the USB drives are not mine. And probably some of USB drives were mine, but I didn't keep them. . . . [Y]ou can lose USB drive. You can give it to somebody, because they're so cheap. They're — sometimes they're a few bucks only.

(*Id.* at 155.) Pushed on whether he gave those devices away or threw them out, he added:

I don't know. I never kept track of them. I didn't keep a code on those flash drives or hard drives. So I never realized that I . . . had an obligation to keep track of all hard drives or flash drives attached to notebooks.

(*Id.* at 155-56.) Dr. Godlevsky said that he checked his home to see if he could locate any of those devices. (*Id.* at 157.) He further explained that “I believe some devices are in the Singletick offices.” (*Id.*) Asked if he'd ever thrown away other external devices, beyond what he'd referred to directly, Dr. Godlevsky said it was possible. (*Id.* at 161) Likewise, he testified that he may have lost devices that were attached to his computers. (*Id.* at 162.)

Pathway also identified fourteen devices that had been connected to Dr. Godlevsky's Singletick computer and which were not produced. (Plaintiffs' Hearing Exhibit No. 37 (hereinafter “Ex. 37”).) Five of those devices had also been connected to Dr. Kuharsky's computer. *Id.* Addressing Pathways' findings generally, Dr. Godlevsky said in his post-hearing brief that “he c[ould] neither speak to the accuracy of the list, nor . . . identify or explain the whereabouts of the devices listed.” (Doc. No. 465 at 4 n.2.)

Dr. Godlevsky has admitted to parting with other computers and devices in the not-too-recent past. He testified that he owned another notebook, one he says he used only for web browsing and e-mail, but that the hard drive of that computer failed about a year and a half ago. (Doc. No. 471 at 150.) He believes that computer was “disposed . . . in the garbage.” (*Id.*) He added that he never used it for coding and never believed he was under an obligation to preserve or produce it. (*Id.*) Dr. Godlevsky testified that he has not intentionally destroyed a computer or a storage device with the intention of keeping it out of evidence or keeping it from Quantlab. (*Id.* at 152.)

Finally, Dr. Godlevsky acknowledged that there are other computers he has not turned over: a home desktop that he did not own until after turning in everything else and a laptop that Singletick gave him after he turned in his other four devices. (*Id.* at 160.) Dr. Godlevsky also said that he keeps a jump drive and a hard drive at the Singletick office in order to transfer and store legal documents related to his ongoing litigation. (*Id.* at 161.)

1. Duty to Preserve

Dr. Godlevsky’s briefing does not dispute that he was under a duty to preserve evidence; at times, he seeks to excuse his conduct by contending that he was not, as the events unfolded, aware of that duty, but he does not, at present, appear to contest that it existed. Nor could he. Some of the devices Godlevsky is alleged to have misplaced were used in the 2007-to-2008 timeframe; while this case had not yet been filed, the initial state court case had, and so Dr. Godlevsky should have known that litigation with Quantlab was likely enough that he could not treat potential evidence so carelessly. By 2008, the FBI raid had occurred, and he certainly would have known that legal proceedings were likely. With respect to the conduct alleged to have occurred since 2011, this case had long been filed and there is absolutely no disputing that

Dr. Godlevsky was under a duty to preserve. Importantly, that does not mean that he was yet under an obligation to produce; he would still have been within his rights to argue against the relevance of some of the material, but it should go without saying that the mere fact that he intended on arguing that something was irrelevant would not allow him simply to discard it.

2. Mental State

To explain the myriad missing devices, Dr. Godlevsky has focused upon how difficult it is to maintain such things and his general lack of awareness of any obligation to do so. He adds in his briefing that he believed that “his duty to preserve evidence for the pending litigation was satisfied by SXP’s data server, SVN server, email server, and their respective back-up tapes” as he thought it was “these materials . . . [and] not a handful of missing USB devices and failed hard drives” that were “central to the instant case.” (Doc. No. 465 at 4.) Finally, Dr. Godlevsky argues that “documenting every electronic document transfer or copy is incredibly onerous and would have required a disproportionate effort.” (Doc. No. 465 at 4.)

The Court cannot credit these excuses. If he was unaware of his duty to preserve, then Dr. Godlevsky was seriously misguided. If he was careless in his treatment of his electronics, he was negligent, perhaps grossly so. Indeed, the loss of a single device may well be the product of negligence, but a long-running inability to keep track of the tools of his trade seems more indicative of a reckless disregard for his obligations as a litigant and, more likely, bad faith. Further, if Dr. Godlevsky genuinely believed that all that mattered was his conduct at SXP, and thus SXP was capable of preserving *all* relevant evidence, then he wildly misjudged the nature of Quantlab’s claims. Not only that, but such a theory wholly ignores that the only way to prove that anything and everything relevant could be found on SXP servers would have been to produce his personal devices and demonstrate that they contained nothing of any moment. And

the Court is not clear where Dr. Godlevsky gets the idea that he was required to “document” his every electronic transfer; simply doing a better job maintaining the devices he used to make those transfers would have sufficed. All of that said, as was true for Mr. Mamalakis, Quantlab has not made any showing of sinister motives on Dr. Godlevsky’s part. In its briefing, Quantlab repeatedly urges that “Godlevsky has offered no explanation for this limited production,” (Doc. No. 449 at 11, 25), but provides no particularized basis for the Court to find that he acted with the express purpose of destroying evidence. Dr. Godlevsky may have been cavalier about his litigation-related obligations, enough for this Court to say that he acted in bad faith, but the Court cannot say that Dr. Godlevsky acted with the most culpable state-of-mind possible.

3. Relevance/Prejudice

There are two primary categories of evidence at issue here and so the Court will address them separately. But as a preliminary matter, in considering relevance and prejudice, the Court’s starting point is the fact that Dr. Godlevsky worked in Quantlab’s high-frequency trading business, left Quantlab in possession of Quantlab trade secrets, and went back to work for other high-frequency trading operations. In this context, the probability that Dr. Godlevsky’s electronic storage devices will contain relevant information is high to begin with.

Moving to the specific devices, with respect to the seven devices that had been attached to Dr. Godlevsky’s personal laptop in 2011 or 2012, and especially the two devices that were also connected to a Singletick computer, it is clear that these would be relevant in the sense that they could have helped to reveal whether Dr. Godlevsky has impermissibly used Quantlab code in more recent years. Quantlab is prejudiced because it cannot make that determination. To be sure, Quantlab has not shown that the devices would have definitively revealed wrongdoing or turned out to be useful at trial, and so the prejudice does not, at present, appear great. But both

parties, and the Court, would have benefited from the presence of the devices. The same is true of the other computers and devices that did not factor prominently into Pathway's report but which Dr. Godlevsky admitted discarding.

Second, with respect to the devices that were attached to computers seized by the FBI, and especially the nineteen such devices that had been connected to computers containing Quantlab code, there is a much higher likelihood of relevance and, as such, the prejudice to Quantlab is greater. An examination of these devices is exactly how the Court would expect Quantlab to go about providing its case. Despite a persuasive presentation of evidence by Quantlab, there is no saying with absolute certainty that the devices at issue would have proved useful at trial. But there seems a real possibility that they would have.

4. Conclusion

The Court reaches the same conclusion with respect to Dr. Godlevsky as it did regarding Mr. Mamalakis. The Court finds that Dr. Godlevsky has acted in bad faith when he put out of reach of the Court potentially relevant evidence. But without a stronger showing of bad faith, or a more definitive demonstration of relevance and prejudice, the Court declines to impose litigation-ending sanctions.

C. Dr. Kuharsky

Quantlab has alleged that Dr. Kuharsky spoliated several different categories of evidence: (1) a specific SanDisk brand flash drive, (2) a series of flash drives that existed around the time of the FBI raid but which were not confiscated at that time, (3) two flash drives that Dr. Kuharsky allegedly used in the past few years, (4) RAID-configured hard drives; (5) a series of encrypted storage devices; (6) cloud-based storage sites; and (7) a collection of devices and computers that were given and/or thrown away. The first three are all very specific allegations

of wrongdoing; the final four are more generalized. As such, the Court analyzes the specific allegations separately from the generalized ones. But, as it was with Dr. Godlevsky, the Court's starting point in considering the accusations made against Dr. Kuharsky is "that the FBI seized literally hundreds of thousands of Quantlab files from Kuharsky, including numerous files created after his termination, as well as Quantlab Technology Group files that, as a Quantlab Research Group Scientist, Kuharsky had no honest explanation for how he could ever have come into contact with them."¹⁰ (Doc. No. 466 at 9.)

1. Specific Devices

a. SanDisk Cruzer

Pathway's preliminary report explains that "[a]nalysis of Kuharsky's SXP Development Computer suggests Quantlab code and an SXP program being accessed nearly simultaneously" on December 18, 2007. (Doc. No. 324-43 at 15.) Pathway explains that, just fourteen minutes after the SXP program was opened on Dr. Kuharsky's computer, a SanDisk Micro Cruzer 4 GB Flash Drive was connected to the computer and a Quantlab file entitled "MultiIndexRegressionModel.cpp" was opened and viewed from the flash drive. (*Id.*) The SanDisk flash drive was connected to the computer for more than three and a half hours. (*Id.*)

Pathway's investigation revealed that that SanDisk flash drive had also been connected to Ms. Maravina's Quantlab computer. (*Id.* at 16.) And, Pathway learned that the device was allegedly "accessed from a deleted Windows XP virtual machine on Kuharsky's SXP Development Computer." (*Id.*) Moreover, "Pathway discovered [that] a Windows XP virtual computer was deleted from [Dr.] Kuharsky's SXP Development Computer." (*Id.*) Pathway added that Dr. Kuharsky's SXP Development Computer runs an operating system that does not

¹⁰ Dr. Kuharsky also sent a letter to Quantlab in 2007 or 2008 claiming that he did not have Quantlab materials, but he now admits that he was wrong when he made that claim. (Doc. No. 478 at 11.)

store device serial numbers, but that “a SanDisk Cruzer with a matching revision number of 3.27 has been confirmed to have been plugged in at least 47 times between 11/27/07 and 1/8/08.” (*Id.*; *see also* Doc. No. 478 at 144.)

This SanDisk flash drive has not been produced. Dr. Kuharsky testified that he had no recollection of the SanDisk 4 GB Cruzer thumb drive. (Doc. No. 478 at 47.) Dr. Kuharsky said that he had not failed to produce it; rather, he said he did not know what had happened to it but he speculated that he may have broken it. (*Id.* at 36.) He noted that he and Ms. Maravina were living together and had access to each other’s belongings. (*Id.* at 37.)

b. Flash Drives That Existed Around Time of FBI Raid

Pathway identified twenty-seven devices that were attached to computers seized in the 2008 FBI raid but not produced in this litigation. (Doc. No. 478 at 146; *see also* Ex. 36). As discussed above, nineteen of those had been connected to computers that contained Quantlab code.¹¹ (Ex. 36 at 1.) Eight of those were also connected to computers determined to be controlled by Dr. Kuharsky. (*Id.*) One of those was also connected to the computers of Ms. Maravina, Dr. Godlevsky, and SXP and was last connected to a known computer in January 2008. (*Id.*) A second device (last connected in June 2007) was shared with just Dr. Godlevsky; a third (last connected in Oct. 2007) with Ms. Maravina and Dr. Godlevsky, and a fourth (last connected Oct. 2006) with just Ms. Maravina. (*Id.*) The remainder was only connected to Dr. Kuharsky’s computer. (*Id.*) Dr. Kuharsky testified that he did not know whether these findings were accurate. (Doc. No. 473 at 81.)

Dr. Kuharsky argues that “there is no evidence or indication that any of these devices contained Quantlab code.” (Doc. No. 463 at 5.) He notes that, “[w]hile it is possible that the

¹¹ Mr. Kersh acknowledged that, “[w]ithout the device we can’t confirm that those are actually Quantlab files, but it appears they are.” (Doc. No. 478 at 154.)

missing devices also contained Quantlab code, it is also possible that they contained other materials, such as information being conveyed to and from legal counsel.” (*Id.*) Dr. Kuharsky also argues that “Quantlab has not been deprived of the ability to prove that Dr. Kuharsky possessed Quantlab code during the time period prior to the FBI search. The computers prove this. Quantlab has not articulated any reason why the missing devices would have any independent relevance even if they contained Quantlab code when they were lost or thrown away.” (*Id.*)

Dr. Kuharsky noted that “the fact remains that Quantlab is seeking sanctions in a lawsuit that was not filed until years after the various devices were last connected to computer.” (*Id.*) Dr. Kuharsky does not dispute that he was under an obligation to preserve evidence “relevant to Quantlab’s allegations,” but uses the time lapse to underscore that the devices “are not relevant to the current motion.” (*Id.*)

Quantlab counters that “the ‘last accessed’ dates come from computers that were seized by the FBI in 2008, which logically are going to have only older dates. What is troubling here is that numerous devices connected to computers known to contain Quantlab materials are now missing, and Kuharsky offers no specific explanation for their disappearance, only generalized statements about how they were easily lost or broken.” (Doc. No. 466 at 13.) Quantlab notes that “it is quite possible that the missing devices were used on different machines at later points in time, but such analysis is now impossible.” (*Id.* at 14.)

c. Devices Not Produced in 2013

In a second set of findings, Pathway reported that two flash drives were missing from the August 2013 production. (Ex. 36 at 2.) That is, Pathway identified two devices that had been

connected to Dr. Kuharsky's personal desktop computer at least twice in early-to-mid 2013, but which were not produced for this litigation. (*Id.*)

Dr. Kuharsky denied knowing whether Pathway's findings were accurate (Doc. No. 473 at 81.) He has argued that "there is no evidence that the thumb drives contained any code" and adds that "this was a time period during which Dr. Kuharsky was exchanging files with the undersigned counsel in connection with the Special Master production and the various motions that were filed during that time period." (Doc. No. 463 at 6.) Moreover, Dr. Kuharsky contends that "there is no evidence that the thumb drives contained anything of relevance to this lawsuit that is not also contained on Dr. Kuharsky's computer," which has been produced. (*Id.*)

d. Analysis

In his briefing, Dr. Kuharsky "do[es] not contest that [he] had a duty to preserve any information relating to Quantlab or SXP."¹² (Doc. No. 463 at 7.) In fact, at the evidentiary hearing, Dr. Kuharsky told the Court that he admitted to the FBI that he had not deleted all Quantlab research team code from his computer in March 2008, but explained that a lawsuit had been filed against him in June 2007 and he believed that deleting Quantlab files could lead to charges of spoliation. (Doc. No. 473 at 108; *see also* Doc. No. 478 at 10.) Thus, Dr. Kuharsky knew as early as 2007 that he should not delete anything potentially relevant to a lawsuit brought by Quantlab. (*Id.* at 109.) There can, then, be no dispute as to whether Dr. Kuharsky had a duty to preserve any of the devices just discussed; the 2013 devices are particularly obvious and even the 2007-2008 devices were used after the point at which Dr. Kuharsky realized he had a duty to preserve relevant evidence.

¹² Dr. Kuharsky said that "for this entire period of time," he understood that he had an obligation to preserve evidence relating to Quantlab and SXP. (Doc. No. 473 at 58.)

Culpability is hard here. On one hand, Dr. Kuharsky's representation is that he more or less just forgot about these devices, and Quantlab has not expressly rebutted that. But, given that Dr. Kuharsky knew that he was obligated to preserve all potentially relevant evidence, it seems totally incomprehensible that he could have used a device some fifty times, and at least once for more than three hours, and then proceeded as if it did not exist. The same is true of a device he used in the summer of 2013. The Court feels it has no choice but to infer bad faith.

On the subject of relevance and prejudice, there is little more to say here than what has been said above with respect to Mr. Mamalakis and Dr. Godlevsky. Quantlab cannot prove with certainty that the device would have been relevant, but devices used as these ones were are such obvious places to check for relevant evidence that the Court cannot possibly say it lacked relevance or that Quantlab was not prejudiced. For Dr. Kuharsky to argue that the devices may have been used for other purposes, such as to exchange files with counsel, is self-serving in the extreme; how easy it is for the one who lost the evidence to say that the evidence may not have been relevant. To be sure, Quantlab has taken possession of some of the computers into which some of these devices were plugged, and so has been able to glean some information about what the devices were used for, but Quantlab does not have any information as to whether the devices were plugged into other computers. And with respect to the devices used before the FBI raid, Quantlab also has no information as to what was done with this device after the FBI raid took place. The best sources of that information — perhaps the only sources — are the devices themselves, and Dr. Kuharsky has deprived Quantlab of that opportunity.

2. Generalized Allegations

The Court places the following sets of evidence in the more “generalized” category of evidence: the RAID Drives, devices and computers given away or broken, the cloud storage

site(s), and other encrypted devices. The Court describes each sub-category and then analyzes them.

a. RAID Drives

Quantlab alleges that Kuharsky “rendered multiple hard drives in his possession inaccessible through encryption or removal from their RAID configurations prior to their much-delayed production.” (Doc. No. 449 at 17.) In response, Dr. Kuharsky contends that “RAID configurations are used to process market data, not to write trading code,” and as such, because “[t]here is no allegation in this lawsuit that Dr. Kuharsky was using data from Quantlab . . . there is no basis in the record for concluding that the RAID configurations would have contained anything relevant to the lawsuit.” (Doc. No. 463 at 4.)

Dr. Kuharsky’s testimony at the evidentiary hearing supports him on this front. He explained that the RAID drives served as a mechanism by which several solid-state hard drives can be linked to one another and function as one. (Doc. No. 473 at 58-59.) Dr. Kuharsky used RAID configuration at Singletick, SXP, Quantlab, and even on his own. (*Id.* at 60-61.) He said that such drives would typically be used for market data, not brain code, because, as configured in all the places where Dr. Kuharsky worked, the RAID configuration was not safe. (*Id.* at 59-60.) One drive failing, he indicated, would be catastrophic. (*Id.* at 60.) He also said he used RAID drives most often to test the speed of access to data. (*Id.* at 61.)

Dr. Kuharsky admitted that, at some point in 2010 or 2011, he took his RAID drives apart. (*Id.* at 61-62, 103-04.) He said that he does not know what he did with the individual component parts, but reiterated that he does not believe there would be any trading-related code on them anyway. Dr. Kuharsky said it did not occur to him, when he was separating the drives,

that doing so would open him up to accusations of spoliation, or that the drives had anything at all to do with this lawsuit. (*Id.* at 62.)

b. Devices Given Away or Broken

Quantlab points to Dr. Kuharsky's decisions to replace home computers that were "obsolete" and to give away computers to family in the Ukraine as just a few examples of his spoliation of evidence. (Doc. No. 449 at 9.) Quantlab argues that, even if those items were obsolete, that "does not mean that Kuharsky was excused from his duty to preserve them as evidence in this case." (*Id.* at 24.)

Dr. Kuharsky has not denied these accusations. He estimates that, since he left Quantlab, he tended to own at least one laptop at all times. (Doc. No. 473 at 54.) As each laptop became obsolete, he would upgrade it for a newer version. (*Id.* at 55.) He gave some of his old computers to family members. (*Id.*) He provided his family in Ukraine with laptops so that they could stay in touch with Dr. Kuharsky and his family. (*Id.*) Dr. Kuharsky added that, after the FBI raid, he bought a new laptop, which he has since given away or broken. (Doc. No. 478 at 95.)

Likewise, Dr. Kuharsky testified that he uses thumb drives often. (Doc. No. 473 at 56.) He said he has occasionally given documents or photos to his lawyer or family via a thumb drive. (*Id.*) Thumb drives also broke quite often, he said. (*Id.* at 57.)

c. Encrypted Devices

Dr. Kuharsky admitted that he had produced some hard drives that were unreadable or encrypted, but denied that he had rendered them so in order to stymie Quantlab. (Doc. No. 473 at 84.) Dr. Kuharsky also confirmed that he had produced items that were encrypted and for which he has lost the password(s). (Doc. No. 478 at 102-03.)

d. Cloud Storage

Dr. Kuharsky said that he may have stored information, potentially including code, on the Cloud or on the Web over the last three years. (*Id.* at 74.) He said that one account may have been at Amazon Cloud. (*Id.* at 75.) He also admitted that the accounts expired years ago. (*Id.*) He testified that he does not save anything to the cloud anymore. (Doc. No. 473 at 68.)

e. Analysis

The Court believes that the loss of the specific evidence discussed above is enough to warrant a spoliation instruction, and so discussion of additional allegations of spoliation is unnecessary. If these generalized allegations of spoliation were the only allegations made against Dr. Kuharsky, the Court may well have found in his favor. But in context, that several other categories of evidence were discarded — even if the showing of relevance as to any one is weak — only helps to confirm the Court’s finding of bad faith.

3. *Conclusion*

Without a stronger showing of culpability or prejudice, the Court is not inclined to issue litigation ending sanctions against Dr. Kuharsky. But, given how many potentially relevant devices he has put out of Quantlab’s reach, the Court is convinced that granting a spoliation instruction is indeed the proper recourse.

D. Supplemental Motion for Sanctions Against Dr. Kuharsky

After the Court held its evidentiary hearing, Quantlab filed a “Supplement to their Motion in Support of Sanctions Against Defendant Kuharsky.” (Doc. No. 469.) It explained that “after Singletick produced Kuharsky’s computer on October 25 . . . Quantlab’s experts discovered that significant portions of the Kuharsky computer were encrypted and inaccessible without a password.” (*Id.* at 1.) It characterizes what followed as “game-playing,” in which despite

myriad attempts, Quantlab has been unable to access the computer. (Doc. No. 469 at 1-2.) For his part, Dr. Kuharsky insists that “the logical path forward would be for Pathway (or Singletick) to provide Dr. Kuharsky with an imaged version of the laptop so that he can try to figure out the log-in password.” (Doc. No. 477 at 3.) He posits that “Quantlab knows that there will be nothing of importance on the laptop, but it sees great value in being able to tell the Court that it cannot access the laptop. Therefore, it will not take the simple, common sense step of providing the laptop to Dr. Kuharsky.” (Doc. No. 487 at 5.)

Based on the representations of Dr. Kuharsky’s counsel, it sounds as though there is still a chance he will be able to determine the correct password. The Court will hold a brief hearing on February 28, 2014 at 2:30 p.m. to determine how best to assist Dr. Kuharsky in doing so.¹³ If Dr. Kuharsky ultimately does uncover his password, there will have been no further spoliation. If he is unable to do so, the loss of this computer will be taken into consideration in formulating the proper spoliation instruction.

E. The Appropriate Sanction

The Court’s discussion thus far of spoliation instructions has been at the most general level. It has concluded that it will allow Quantlab to argue spoliation to the jury, but it has not decided the manner in which Quantlab will be permitted to do so.

In *Rimkus*, “the record . . . present[ed] conflicting evidence about the reasons the defendants deleted the emails and attachments; evidence that some of the deleted emails and attachments were favorable to the defendants; and an extensive amount of other evidence for the plaintiff to use” — in other words, there was uncertainty as to the exact degree of culpability, relevance, or prejudice. *Rimkus*, 688 F. Supp. at 620. As such, the court determined that “the jury [would] not be instructed that the defendants engaged in intentional misconduct.” *Id.*

¹³ This hearing will also serve as an opportunity to devise a new scheduling order.

Rather, the court decided that “the instruction [would] ask the jury to decide whether the defendants intentionally deleted emails and attachments to prevent their use in litigation. If the jury [found] such misconduct, the jury [would] then decide, considering all the evidence, whether to infer that the lost information would have been unfavorable to the defendants.” *Id.*

Given that the same questions exist here, regarding just how culpable Defendants have been, and just how relevant the deleted evidence would have been, the Court is inclined to follow a similar approach. On the other hand, it also sees the appeal to the approach advocated for by the magistrate judge in *Apple*, 888 F. Supp. 2d 976. There, the magistrate’s order would have “instruct[ed] the jury that ‘Samsung has failed to prevent the destruction of relevant evidence for Apple’s use in this litigation,’ rather than allowing the jury to decide whether Samsung ha[d] destroyed documents, and if so, whether those documents [we]re relevant. Second, it permit[ed] the jury to draw an adverse inference and to find this adverse inference ‘determinative, somewhat determinative, or not at all determinative in reaching your verdict.’” *Id.* at 994 (quoting *Apple Inc. v. Samsung Electronics Co., Ltd.*, 881 F. Supp. 2d 1132, 1151 (N.D. Cal. 2012)). In contrast, because Judge Koh “f[ound] it difficult to conclude that Apple’s ‘ability to go to trial’ was significantly hampered where discovery in this case has been so voluminous,” she determined that it would be inappropriate to “permit[] the jury to find Samsung’s spoliation ‘determinative’ of all issues in the case.” *Id.* at 994-95. That too appears a potential route for the spoliation instruction in this case.

In the end, though it is hesitant to invite more briefing on the subject, the Court does not want to fashion a spoliation instruction without the input of the parties. And more than that, it does not wish to do so until the nature of Quantlab’s case is brought into more crystalline focus, for doing so may shed new light on the relevance of the evidence lost. The Court therefore will

craft the spoliation instruction at the same time it does the rest of the jury instructions (should this case proceed to trial).

V. MOTION FOR SANCTIONS AGAINST SINGLETICK

A. Relevant Background

In advance of the court's evidentiary hearing on sanctions against Defendants, Quantlab also sought sanctions against Singletick in light of its "eleventh-hour attempt to frustrate an order of this Court." (Doc. No. 428 at 1.) Quantlab's central premise is that Singletick took possession of computers and documents that the Court ordered Kuharsky and Godlevsky to produce and then refused to turn over the devices to Quantlab. Specifically, Quantlab asks that Singletick be "made to pay the fees and costs borne by Quantlab as a result of Singletick's actions." (*Id.* at 8.) Singletick countered that all it sought to do was to protect its intellectual property from a competitor and that, insofar as it insisted on adherence to the formalities of the Federal Rules, it was merely exercising its rights.

Eventually, Singletick was served with a subpoena, moved to quash, appeared before a judge in Wisconsin, and was ordered to produce the relevant computers. The motion to quash was denied with the condition that the Protective Order in place here – attorneys' eyes only – applies and that, once the computers got to Texas, Singletick could seek additional protections from this Court.

Still, Quantlab made clear in its reply brief that it does *not* think that Singletick should be absolved just because it has produced the relevant computers. (Doc. No. 443 at 8.)

B. Analysis

The parties dispute whether this Court is empowered to sanction a non-party. The Court suspects that it is, but it will not bother resolving that disagreement at this time, as it reluctantly

concludes that, even if it could sanction Singletick, it would not. The Court always prefers that parties seek to reach good-faith, common-sense arrangements for the production of relevant evidence and it can hardly see how Singletick's decision to hide behind the formalities of the Federal Rules was necessary. Nevertheless, the Federal Rules of Civil Procedure exist for a reason, and the Court will not sanction Singletick for resorting to them. Should Singletick later be required to produce anything else, and should it take an equally obstinate approach to such a request, the Court will look far more favorably upon a request for sanctions.

VI. CONCLUSION

This Court recently noted that it “does not easily grant sanctions.” *Alexander v. State Farm Lloyds*, No. 4:12-CV-490, 2014 WL 549389, at *11 (S.D. Tex. Feb. 11, 2014). But it also noted that “each participant in the judicial process must bring to it a measure of good faith,” *id.* at *1, and when that does not occur, it has fewer reservations about holding litigants to account for their bad faith. A staggering amount of evidence potentially relevant to this case has been lost. And while the loss of any one device or computer or document may seem relatively inconsequential, viewed as a whole, the spoliation that has taken place here is deeply troubling. The real reasons why this evidence has been lost are not yet known.

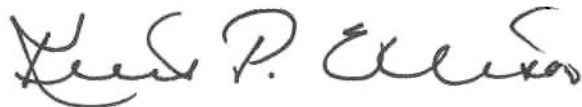
The duty to preserve evidence prior to and during litigation is, in many contexts, obvious to lawyers, but not to clients. In this instance, however, such a duty should have been obvious to everyone. When employees depart one company and soon start a competitor company, litigation can never be said to be wholly unexpected, especially when — as here — the departures were not amicable. Moreover, Defendants are highly educated and fully familiar with materials likely to be sought and the means by which they can be preserved. Many courts would have held that,

on the current record, litigation ending sanctions are appropriate. This Court may soon come to that conclusion.

Although it seems slightly premature to conclude that Defendants destroyed evidence with the conscious intent of keeping it from Quantlab, the Court also struggles to ascertain another reason that so much evidence would have vanished. The Court is satisfied that, at least based on the evidence now before it, a spoliation instruction — the precise wording of which it will craft after a more complete picture of the evidence is adduced and trial is closer at hand — will punish Defendants for their wrongdoing and deter future litigants from engaging in similar conduct, while at the same time not allowing Quantlab to, as Defendants fear, “win this case through sanctions.” Should new evidence make it necessary, however, the Court is always willing to reconsider its conclusion. For now, though, the Court welcomes the opportunity to return its focus to the merits of the case. The parties should seek to bring the case to its long-overdue conclusion.

IT IS SO ORDERED.

SIGNED in Houston, Texas, on this the 19th day of February, 2014.

A handwritten signature in dark ink, appearing to read "Keith P. Ellison", written over a horizontal line.

KEITH P. ELLISON
UNITED STATES DISTRICT COURT JUDGE